

**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OPERATING PERMIT TECHNICAL REVIEW DOCUMENT**

**Permitting and Compliance Division
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Cenex Harvest States Cooperatives
Laurel Refinery
P.O. Box 909
802 South Highway 212
Laurel, Montana 59044-0909

The following table summarizes the air quality programs testing, monitoring, and reporting requirements applicable to this facility.

Facility Compliance Requirements	Yes	No	Comments
Source Tests Required	X		
Ambient Monitoring Required		X	
COMS Required		X	
CEMS Required	X		
Schedule of Compliance Required		X	
Annual Compliance Certification and Semiannual Reporting Required	X		
Monthly Reporting Required	X		
Quarterly Reporting Required	X		
Applicable Air Quality Programs			
ARM Subchapter 7 Preconstruction Permitting	X		Permit #1821-05
New Source Performance Standards (NSPS)	X		Subpart A, Subpart J, Subpart Dc, Subpart Kb, Subpart GGG, Subpart QQQ
National Emission Standards for Hazardous Air Pollutants (NESHAPS)	X		Subpart FF
Maximum Achievable Control Technology (MACT)	X		Subpart R, Subpart CC
Major New Source Review (NSR), including Prevention of Significant Deterioration (PSD)	X		
Risk Management Plan Required (RMP)	X		
Acid Rain Title IV		X	
State Implementation Plan (SIP)	X		Billings/Laurel SIP

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SECTION I. GENERAL INFORMATION

A. Purpose

This document establishes the basis for the decisions made regarding the applicable requirements, monitoring plan, and compliance status of emission units affected by the operating permit proposed for this facility. The document is intended for reference during review of the proposed permit by the EPA and the public. It is also intended to provide background information not included in the operating permit and to document issues that may become important during modifications or renewals of the permit. Conclusions in this document are based on information provided in the original application submitted by Cenex Harvest States Cooperatives (Cenex) on 07/10/95.

B. Facility Location

The Cenex Laurel Refinery is located at the South ½, Section 16, Township 2 South, Range 24 East, Yellowstone County. This legal description refers to a physical address of 802 South Highway 212, Laurel, Montana.

C. Facility Background Information

On May 11, 1992, Cenex was issued **Permit #1821-01** for the construction and operation of a hydro-treating process to desulfurize Fluidized Catalytic Cracking Unit (FCCU) feedstocks. The existing refinery property lies immediately south of the City of Laurel and about 13 miles southwest of Billings, Montana. The new equipment for the desulfurization complex is located near the western boundary of the existing refining facilities.

The HDS process is utilized to pretreat FCCU feeds by removing metal, nitrogen, and sulfur compounds from these feeds. The proposed HDS unit also improved the quality of refinery finished products including gasoline, kerosene, and diesel fuel. The HDS project significantly improved the finished product quality by reducing the overall sulfur contents of liquid products from the Cenex Refinery. The HDS unit provided low sulfur gas-oil feedstocks for the FCCU, which resulted in major reductions of sulfur oxide emissions to the atmosphere. However, only a minor quantity of the proposed sulfur dioxide (SO₂) emission reductions were made federally enforceable.

The application was not subject to the New Source Review (NSR) program for either nonattainment or Prevention of Significant Deterioration (PSD) since Cenex chose to "net out of major modification review" for the affected pollutants due to contemporaneous emission reductions at an existing emission unit.

The application was deemed complete on March 24, 1992. Additional information was received on April 16, 1992, in which Cenex proposed new short-term emission rates based upon modeled air quality impacts.

The basis for the permit application was due to a net contemporaneous emission increase that was less than the significant level of 40 tons per year for SO₂ and NO_x. The application referred to significant SO₂ emission reductions that were expected by addition of the HDS project. These anticipated major SO₂ reductions were not committed to by Cenex under federally enforceable permit conditions and limitations. The contemporaneous emission decreases for SO₂ and NO_x, which were made federally enforceable under this permitting action, amount to approximately 15.5 and 23.7 tons per year, respectively. Construction of the HDS/sulfur recovery complex was completed in December 1993, and the 180-day shakedown period ended in June 1994.

Permit #1821-02 was issued on February 1, 1997, to authorize the installation of an additional boiler (#10 Boiler) to provide steam for the facility. Cenex submitted the original permit application for a 182.50-MMBtu/hr boiler on February 9, 1996. This size boiler is an NSPS-affected facility and the requirements of NSPS, Subpart Db, would have applied to the boiler. On November 15, 1996, Cenex submitted a revised permit application proposing a smaller boiler (99.90 MMBtu/hr). The manufacturer of the proposed boiler had not been identified; however, the boiler was to be rated at approximately 80,000 lbs steam/hour with a heat input of 99.9 MMBtu/hour. The boiler shall have a minimum stack height of 75 feet above ground level. The boiler will be fired on natural gas until November 1, 1997, at which time Cenex will be allowed to fire refinery fuel gas in the boiler. The requirements of NSPS, Subpart Dc, apply to the boiler. The requirements of NSPS, Subpart J and GGG, also applied as of November 1, 1997. Increases in emissions from the new boiler were detailed in Section IV of the permit analysis for Permit #1821-02. Modeling performed showed that the emissions increase would not result in a significant impact to the ambient air quality (see Section VI of the permit analysis).

Cenex also requested a permit alteration to remove the SO₂ emission limits (Section II.E.2.a of Permit #1821-01) for the C-201B compressor engine because the permit already limits C-201B to be fired on either natural gas or unodorized propane. Cenex also requested that if the SO₂ emission limits could not be removed, the limits should be corrected to allow for the combustion of natural gas and propane. The Department altered the permit to allow for burning odorized propane in the C-201B compressor.

Cenex also requested a permit modification to change the method of determining compliance with the HDS Complex emitting units. Permit #1821-01 required that compliance with the hourly (lb/hr) emission limits be determined through annual source testing and that the daily (lb/day), annual (ton/yr), and ARM 17.8, Subchapter 8, requirements (i.e., PSD significant levels and review) be determined by using actual fuel-burning rates and the manufacturer's guaranteed emission factors listed in Attachment B. Cenex requested to use actual fuel-burning rates and fixed emission factors determined from previous source test data in order to determine compliance with the daily (lb/day) and annual (ton/yr) emission limits. The Department agreed that actual stack testing data is preferred to manufacturer's data for the development of emission factors. However, the Department required that the emission factor be developed from the most recent source test and not on an average of previous source tests. The permit was changed to remove Attachment B and rely on emission factors derived from the most recent source test, along with actual fuel flow rates for compliance determinations. However, in order to determine compliance with ARM 17.8, Subchapter 8, Cenex shall continue to monitor the fuel gas flow rates in both scf/hr and scf/year.

This permit (#1821-02) was written to maintain the language from the HDS Complex Permit #1821-01, where possible, and to separate the HDS Complex Permit #1821-01 requirements from the requirements for the current action (Boiler #10). The permit requirements from Permit #1821-01 were included in Permit #1821-02.

On June 4, 1997, Cenex was issued Permit **#1821-03** to modify emissions and operational limitations on components in the Hydrodesulfurization Complex at the Laurel refinery. The unit was originally permitted in 1992, but has not been able to operate adequately under the emission and operational limitations originally proposed by Cenex and permitted by the Department. This permitting action corrected these limitations and conditions. The new limitations established by this permitting action were based on operational experience and source testing at the facility and the application of Best Available Control Technology (BACT). The following emission limitations were modified by this permit.

Source	Pollutant	Previous Limit	New Limit
SRU Incinerator stack (E-407 & INC-401)	SO ₂	291.36 lb/day	341.04 lb/day
	NO _x	2.1 ton/yr 11.52 lb/day 0.48 lb/hr	3.5 ton/yr 19.2 lb/day 0.8 lb/hr
Compressor (C201-B)	NO _x	18.42 ton/yr	30.42 ton/yr
		6.26 lb/hr	7.14 lb/hr
	CO	16.45 ton/yr	68.6 ton/yr
		5.15 lb/hr - when on natural gas	6.4 lb/hr - when on natural gas
	VOC	6.26 ton/yr	10.1 ton/yr
Fractionator Feed Heater (H-202)	SO ₂	0.53 ton/yr	4.93 ton/yr
		0.135 lb/hr	1.24 lb/hr
	NO _x	6.26 ton/yr	8.34 ton/yr
		1.43 lb/hr	2.09 lb/hr
	CO	3.29 ton/yr	6.42 ton/yr
		1.00 lb/hr	1.61 lb/hr
	VOC	0.26 ton/yr	0.51 ton/yr
Reactor Charge Heater (H-201)	SO ₂	0.214 lb/hr	1.716 lb/hr
		0.79 ton/yr	6.83 ton/yr
	NO _x	9.24 ton/yr	11.56 ton/yr
		2.11 lb/hr	2.90 lb/hr
H-201 (cont.)	CO	4.86 ton/yr	8.89 ton/yr
		1.40 lb/hr	2.23 lbs/hr
	VOC	0.39 ton/yr	0.71 ton/yr
Reformer Heater (H-101)	SO ₂	0.128 lb/hr	2.15 lb/hr
		0.48 ton/yr	3.35 ton/yr
	NO _x	6.16 lb/hr	6.78 lb/hr
	VOC	0.24 ton/yr	0.35 ton/yr
Old Sour Water Stripper	SO ₂	304.2 ton/yr	290.9 ton/yr
	NO _x	125.7 ton/yr	107.9 ton/yr

Emission limitations in this permit are based on the revised heat input capacities for units within the HDS. The following changes were made to the operational requirements of the facility.

Unit	Originally Permitted Capacity	New Capacity
SRU Incinerator stack (E-407 & INC-401)	4.8 MMBtu/hr	8.05 MMBtu/hr
Compressor (C201-B)	1600 HP (short term) 1067 HP (annual average)	1800 HP (short term and annual average)
Fractionator Feed Heater (H-202)	27.2 MMBtu/hr (short term) 20.4 MMBtu/hr (annual avg.)	29.9 MMBtu/hr (short term) 27.2 MMBtu/hr (annual avg.)
Reactor Charge Heater (H-201)	37.7 MMBtu/hr (short term) 30.2 MMBtu/hr (annual avg.)	41.5 MMBtu/hr (short term) 37.7 MMBtu/hr (annual avg.)
Reformer Heater (H-101)	123.2 MMBtu/hr (short term and annual avg.)	135.5 MMBtu/hr (short term) 123.2 MMBtu/hr (annual avg.)

It was determined that the emission and operational rates proposed during the original permitting of the HDS unit were incorrect and should have been at the levels Cenex was now proposing. Because of this, the permit action and the original permitting of the HDS had to be considered one project in order to determine the permitting requirements. When combined with the original permitting of the HDS, the emission increases of NO_x and SO₂ would exceed significant levels and subject this action to the requirements of the NSR/PSD program. During the original permitting of the HDS complex, Cenex chose to “net out” of NSR and PSD review by accepting limitations on the emissions of NO_x and SO₂ from the old sour water stripper (SWS). Because of the emission increases proposed in this permitting action, additional emission reductions had to occur. Cenex proposed additional reductions in emissions from the old SWS to offset the increases allowed by this permitting action. These limitations would reduce the “net emissions increase” to less than significant levels and negate the need for review under the NSR/PSD program. The new emission limits for SO₂ and NO_x from the old SWS are 290.9 and 107.9 tons/year, respectively.

This permitting action also removed the emission limits and testing requirements for PM₁₀ on the HDS Heaters (H-101, H-201, and H-202). These heaters combust refinery gas, natural gas and PSA gas. The Department determined that potential PM₁₀ emissions from these fuels were minor and that emission limits and the subsequent compliance demonstrations for this pollutant were unnecessary. Also removed from this permit were the compliance demonstration requirements for SO₂ and VOCs when the combustion units are firing natural gas. The Department determined that firing the units solely on natural gas would, in itself, demonstrate compliance with the applicable limits.

This action would result in an increase in allowable emissions of VOC and CO by 4.7 ton/yr and 60 ton/yr, respectively. Because of the offsets provided by reducing emissions from the old SWS, this permitting action would not increase allowable emissions of SO₂ or NO_x from the facility.

The following changes were made to the Department's preliminary determination (PD) in response to comments from Cenex.

1. The emission limits for the old SWS in Section II.D.2 were revised to ensure that the required offsets were provided without putting Cenex in a non-compliance situation at issuance of the permit. The compliance determinations of Section II.G.5 and the reporting requirements of Section II.H.1.d were also changed to reflect this requirement.
2. The CO emission limits for H-201 in Section II.D.6 were revised; the old limits were inadvertently left in the PD. The table in Section I.B of the analysis was also changed to reflect this.
3. Section III.E.2 was changed to clarify that the firing of natural gas would show compliance with the VOC emission limits for Boiler #10.
4. Section F of the General Conditions was removed because the Department had placed the applicable requirements from the permit application into the permit.
5. Numbering had been changed in Section III.

Permit **#1821-04** was issued to Cenex on March 6, 1998, in order to comply with the gasoline loading rack provisions of 40 CFR 63, Subpart CC - National Emission Standards for Petroleum Refineries, by August 18, 1998. Cenex proposed to install a gasoline vapor collection system and enclosed flare for the reduction of hazardous air pollutants (HAPs) resulting from the loading of gasoline. A vapor combustion unit (VCU) was added to the product loading rack. The gasoline vapors would be collected from the trucks during loading, then routed to an enclosed flare where combustion would occur. The result of this project would be an overall reduction in the amount of VOCs (503.7 tpy) and HAPs emitted, but CO and NO_x emissions would increase slightly (4.54 tpy and 1.82 tpy).

The product loading rack was used to transfer refinery products (gasoline, burner and/or diesel fuels) from tank storage to trucks, which transport gasoline and other products, to retail outlets. The loading rack consisted of three arms, each with a capacity of 500 gpm. However, only two loading arms were presently used for loading gasoline at any one time. A maximum gasoline-loading rate of 2000 gpm, a maximum short-term rate, was modeled to account for future expansion.

Because Cenex's product loading rack VCU was defined as an incinerator under MCA 75-2-215, a determination that the emissions from the VCU would constitute a negligible risk to public health was required prior to the issuance of a permit to the facility. Cenex and the Department identified the following hazardous air pollutants from the flare, which were used in the health risk assessment. These constituents are typical components of Cenex's gasoline.

1. Benzene
2. Toluene
3. Ethyl Benzene
4. Xylenes
5. Hexane
6. 2,2,4 Trimethylpentane
7. Cumene
8. Napthalene
9. Biphenyl

The reference concentration for Benzene was obtained from EPA's IRIS database. The ISCT3 modeling performed by Cenex, for the hazardous air pollutants identified above, demonstrated compliance with the negligible risk requirement.

On September 3, 2000, Permit #1821-05 was issued to Cenex to revamp its No. 1 Crude Unit in order to increase crude capacity, improve product quality, and enhance energy recovery. The proposed project involved the replacement and upgrade of various heat exchangers, pumps, valves, towers, and other equipment. Only volatile organic compound (VOC) emissions would be affected by the proposed new equipment. The capacity of the No. 1 Crude Unit was expected to increase by 10,000 or more barrels per stream day.

No increase in allowable emissions was sought under this permit application. The proposed project actually decreased VOC emissions from the No. 1 Crude Unit. However, increasing the capacity of the No. 1 Crude Unit was expected to increase the current utilization of other units throughout the refinery and thus may increase actual site-wide emissions, as compared to previous historical levels. Therefore, the permit included enforceable limits, requested by Cenex, on future site-wide emissions. The limits allowed emission increases to remain below the applicable significant modification thresholds that trigger the New Source Review (NSR) program for Prevention of Significant Deterioration (PSD) and Nonattainment Area (NAA) permitting.

The site-wide limits were calculated based on the addition of the PSD/NAA significance level for each particular pollutant to the actual refinery emissions from April 1998, through March 2000, for SO₂, NO_x, CO, PM-10, and TSP minus 0.1 ton per year (tpy), to remain below the significance level. A similar methodology was used for the VOC emissions cap, except that baseline data from the time period 1993 and 1999 were used to track creditable increases and decreases in emissions. The site-wide limits are listed in the following table.

Pollutant	Period Considered for Prior Actual Emissions	Average Emissions over 2-yr Period (tpy)	PSD/NAA Significance Level (tpy)	Proposed Emissions Cap (tpy)
SO ₂	April 1998-March 2000	2940.4	40	2980.3
NO _x	April 1998-March 2000	959.5	40	999.4
CO	April 1998-March 2000	430.8	100	530.7
VOC	1993-1999	1927.6	40	1967.5
PM-10	April 1998-March 2000	137.3	15	152.2
TSP	April 1998-March 2000	137.3	25	162.2

For example, the SO₂ annual emissions cap was calculated as follows:

Average refinery-wide SO₂ emissions in the period of April 1998 through 2000, added to the PSD/NAA significance level for SO₂ minus 0.1 tpy =

$$2940.4 \text{ tpy} + 40 \text{ tpy} - 0.1 \text{ tpy} = 2980.3 \text{ tpy} = \text{Annual emissions cap.}$$

Permit #1821-05 replaced Permit #1821-04.

HB 311, the Montana Private Property Assessment Act, requires analysis of every proposed state agency administrative rule, policy, permit condition or permit denial, pertaining to an environmental matter, to determine whether the state action constitutes a taking or damaging of private real property that requires compensation under the Montana or U.S. Constitution. As part

of issuing an operating permit, the Department is required to complete a Taking and Damaging Checklist. As required by 2-10-101 through 105, Montana Code Annotated (MCA), the Department has conducted a private property taking and damaging assessment and has determined there are no taking or damaging implications. The checklist was completed on October 13, 2000.

D. Compliance Designation

A level II inspection is conducted at Cenex on an annual basis. The last inspection was conducted on June 21, 2000. After reviewing the Department's files and inspections at the facility, Cenex was found to be in compliance with all of its air quality permits.

SECTION II. SUMMARY OF EMISSION UNITS

A. Facility Process Description

Cenex is a petroleum refinery located in Laurel, Montana. The refining process distills crude oil using heat. This distillation separates the crude oil into its component parts. The refiner then cracks some of the heavier molecules by applying heat in the presence of a catalyst to make the reaction take place. These raw products are then treated in several ways to take out impurities. Finally, the proper liquids and additives are blended to create the desired product.

B. Emission Units and Pollution Control Device Identification

Emission Unit ID	Description	Pollution Control Device/Practice
EU001	Plant-wide and Multiple Emitting Unit Limitations	Permit #1821-05 Limits, Billings/ Laurel SO ₂ Stipulation, and MACT LDAR program, where applicable
EU002	#1 Crude Unit - #1 Crude Unit Preheater - #1 Crude Unit Main Heater - #1 Crude Unit Vacuum Heater	CEMS on Refinery Fuel Gas Header, LDAR, Billings/ Laurel SO ₂ Stipulation
EU003	#2 Crude Unit - #2 Crude Unit Preheater - #2 Crude Unit Main Heater - #2 Crude Unit Vacuum Heater	CEMS on Refinery Fuel Gas Header, LDAR, Billings/ Laurel SO ₂ Stipulation
EU004	PDA Unit - PDA Asphalt Heater	CEMS on Refinery Fuel Gas Header, Billings/ Laurel SO ₂ Stipulation
EU005	#1 & #2 Naphtha Unifiners - #1 Naphtha Unifiner Charge Heater - #1 Naphtha Unifiner Stripper Reboiler Heater - #1 Naphtha Unifiner Splitter Reboiler Heater - #2 Naphtha Unifiner Charge, Reboiler Heater - #1 Unifiner Compressor Engine - #2 Unifiner Compressor Engine	CEMS on Refinery Fuel Gas Header, LDAR, Billings/ Laurel SO ₂ Stipulation

Emission Unit ID	Description	Pollution Control Device/Practice
EU006	Middle Distillate Unifiner <ul style="list-style-type: none"> - Middle Distillate Unifiner Charge Heater - Middle Distillate Unifiner Stripper Reboiler Heater - #3 Unifiner Compressor Engine - #4 Unifiner Compressor Engine 	CEMS on Refinery Fuel Gas Header, Billings/ Laurel SO ₂ Stipulation
EU007	Platformer Unit <ul style="list-style-type: none"> - Platformer Heater - Platformer Debutanizer Reboiler Heater - Platformer Recycle Compressor Turbine 	CEMS on Refinery Fuel Gas Header, LDAR, Billings/ Laurel SO ₂ Stipulation
EU008	Fluid Catalytic Cracking (FCC) Unit <ul style="list-style-type: none"> - FCC Feed Preheater - FCC CO Boiler and FCC Regenerator 	CEMS on Refinery Fuel Gas Header, LDAR, SO ₂ CEMS, Billings/ Laurel SO ₂ Stipulation
EU009	Alkylation/Butamer/Merox Units <ul style="list-style-type: none"> - Alkylation Unit Hot Oil Belt Heater - Miscellaneous Process Vent (Alkylation Unit Butamer Stabilizer Offgas) 	CEMS on Refinery Fuel Gas Header, LDAR, Billings/ Laurel SO ₂ Stipulation
EU010	Hydrosulfurization Unit and Hydrogen Plant <ul style="list-style-type: none"> - Reformer Heater - Reactor Charge Heater - Fractionator Feed Heater - Hydrogen Compressor Gas Engine 	CEMS on Refinery Fuel Gas Header, LDAR, Permit #1821-05 Limits, Low NO _x Technology (on heaters), Billings/ Laurel SO ₂ Stipulation
EU011	Sulfur Recovery Unit (New)	Permit #1821-05 Limits, Low NO _x Technology, SO ₂ CEMS, Billings/ Laurel SO ₂ Stipulation
EU012	Sulfur Recovery Unit (Old) (made up of the #1 SRUs) <ul style="list-style-type: none"> - #1 Sulfur Recovery Unit Incinerator 	SO ₂ CEMS, Billings/ Laurel SO ₂ Stipulation
EU013	Steam Generation Units <ul style="list-style-type: none"> - #1 Fuel Oil Heater - #2 Fuel Oil Heater - #9 Boiler - #3 Boiler - #4 Boiler - #5 Boiler - #10 Boiler 	CEMS on Refinery Fuel Gas Header, Permit #1821-05 Limits Fuel Oil Flow Meters (#3, #4, #5 Boilers) LDAR and Low NO _x Technology (#10 Boiler), Billings/ Laurel SO ₂ Stipulation
EU014	Tank Farm <ul style="list-style-type: none"> - MACT Group 1 Storage Vessels: Tanks 61, 70, 74, 75, 78, 82, 83, 93, 95, 100, 101, 102, 103, 108, 109, 110, 112 - MACT Group 2 Storage Vessels: Tanks 2, 4, 6, 7, 9, 11, 12, 23 (being converted to floating roof to meet Group 1 criteria), 25, 28, 29, 41, 43, 44, 47, 52, 55, 56, 60, 62, 63, 64, 65, 66, 67, 68, 71, 73, 76, 77, 79, 80, 81, 85, 86, 87, 88, 89, 90, 91, 92, 94, 96, 97, 98, 99, 104, 105, 106, 107, 111, 113, 114, 115, 116, 117, 118 (Wastewater Treatment, meets Group 1 criteria), 119, 120, 121, 122, 601, BP-2 - Other: Tanks 123, B-1, B-2, B-7, firetk 1, firetk 2, firetk 3, firetk 4, tank 60 heater, tank BP2 heater. 	Internal and External Floating Roofs, Fixed Roofs, LDAR (as applicable), Billings/ Laurel SO ₂ Stipulation
EU015	Transfer Facilities <ul style="list-style-type: none"> - Asphalt Loading Heater #1 - Asphalt Loading Heater #2 - Pitch Flaker & #4 Cooling Tower - Product Loading Rack Vapor Combustion Unit (VCU) 	Vapor Combustion Unit on Light Product Truck Loading Rack LDAR, Billings/ Laurel SO ₂ Stipulation
EU016	Wastewater Treatment Units	Enclosed conveyance and other wastewater controls for affected equipment per NSPS QQQ

Emission Unit ID	Description	Pollution Control Device/Practice
EU017	Flare System	Flare, Billings/ Laurel SO ₂ Stipulation
EU018	RCRA Units	Restrictions on Land Tillage (HWA permit)
EU019	Cooling Towers	None
EU020	Saturate Gas Concentration Unit	None

SECTION III. PERMIT CONDITIONS

A. Emission Limits and Standards

Emission limits and standards in the Title V permit were established from the preconstruction permits, the Billings/Laurel SIP, NSPS requirements, NESHAP requirements, and MACT requirements. Cenex currently has 27 active preconstruction permits. The following is a list of those permit numbers: #9-091868, #56-091569, #55-091569, #105-042970, #129-062270, #272-061171, #363-112971, #364-112971, #362-112971, #499-102372, #540-030773, #664-112073, #665-112073, #674-121973, #800-041675, #1111, #1161, #1176, #1175, #1168, #1169, #1170, #1173, #1174, #1317, #1552, #1821-05. Permits #14-110768, #1171, and #1172 were revoked.

B. Monitoring Requirements

ARM 17.8.1212(1) requires that all monitoring and analysis procedures or test methods, required under applicable requirements, be contained in operating permits. In addition, when the applicable requirement does not require periodic testing or monitoring, periodic monitoring must be prescribed that is sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit.

The requirements for testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance, does not require the permit to impose the same level of rigor for all emission units. Furthermore, it does not require extensive testing or monitoring to assure compliance with the applicable requirements for emission units that do not have significant potential to violate emission limitations or other requirements under normal operating conditions. When compliance with the underlying applicable requirement for an insignificant emission unit is not threatened by lack of regular monitoring and when periodic testing or monitoring is not otherwise required by the applicable requirement, the status quo (**i.e., no monitoring**) will meet the requirements of ARM 17.8.1212(1). Therefore, the permit does not include monitoring for insignificant emission units.

The permit includes periodic monitoring or recordkeeping for each applicable requirement. The information obtained from the monitoring and recordkeeping will be used by the permittee to periodically certify compliance with the emission limits and standards. However, the Department may request additional testing to determine compliance with the emission limits and standards.

C. Test Methods and Procedures

The operating permit may not require testing for all sources if routine monitoring is used to determine compliance, but the Department has the authority to require testing if deemed necessary to determine compliance with an emission limit or standard. In addition, the permittee may elect to voluntarily conduct compliance testing to confirm its compliance status.

D. Recordkeeping Requirements

The permittee is required to keep all records listed in the operating permit as a permanent business record for at least 5 years following the date of generation of the record.

E. Reporting Requirements

Reporting requirements are included in the permit for each emission unit, and Section V of the operating permit, "General Conditions", explains the reporting requirements. However, the permittee is required to submit monthly reports, quarterly reports, semi-annual monitoring and annual monitoring reports to the Department and to annually certify compliance with the applicable requirements contained in the permit. The reports must include a list of all emission limit and monitoring deviations, the reason for any deviation, and the corrective action taken as a result of any deviation.

To eliminate redundant reporting, a source may reference previously submitted reports (with at least the date and subject of the report) in the semi-annual and annual reports instead of resubmitting the information in monthly, quarterly, and/or other reports. However, a source must still certify continuous or intermittent compliance with each applicable requirement annually.

F. Public Notice

In accordance with ARM 17.8.132, a public notice was published in the *Billings Gazette* newspaper on or before *January 5, 2001*. The Department provided a 30-day public comment period on the draft operating permit from *January 5, 2001* through *February 4, 2001* (as February 4, 2001 was a Sunday, by statute the comment period was extended through February 5, 2001). ARM 17.8.1232 requires the Department to keep a record of both comments and issues raised during the public participation process. The Department did not receive any comments other than those submitted by Cenex.

G. Draft Permit Comments

On *February 5, 2001*, the Department received comments from Cenex on the Public Comment Draft Operating Permit #OP1821-00 for their facility. Those comments and the Department's response are included in the following table.

Summary of Permittee Comments

Permit Reference	Permittee Comment	Department Response
General Comments		
Format	Cenex suggests a format change to make the permit more easily understood and more useful as a compliance tool for both Cenex and the Department.	The Department appreciates Cenex's suggestions, however, will not incorporate these changes into the current permit to maintain consistency between all of the Department's Title V permits. The Department will consider these changes when drafting the format for the next round of Title V permits.
Citations	Applicable requirements must be used for all conditions throughout the permit.	Applicable requirements have been added in the areas that were without.
References to the Montana Source Test Protocol and Procedures Manual	Cenex is concerned about the use of this guidance document in this Title V permit.	The Department has added ARM 17.8.106, an applicable requirement, to Section III.A, Facility Wide Requirements as Section III.A.1. This section specifies use of the current (July 1994) version of the Montana Source Test Protocol and Procedures Manual, unless this version is superseded by rulemaking. All other references to the Source Test Protocol in OP1821-00 have been changed to Section III.A.1.
References to the Billings/Laurel SO ₂ Control Plan	Cenex is concerned about some of the references to the control plan that are misplaced and/or incorrectly cited.	The references have been corrected.
State-only Provisions	Cenex requests that DEQ clearly identify all State-only provisions in the final version of this Title V permit.	The Department has identified State-only requirements in the permit.
Annual Certifications	Although Cenex agrees that the inclusion of the general compliance certification and deviation reporting requirements is appropriate, Cenex believes that restating these general requirements for each specific emitting unit is redundant and should be removed.	A paragraph has been added in the TRD in Section III.E Reporting Requirements to specify that redundant reporting is not necessary or expected. However, to maintain consistency with the other Title V permits and with the intent of Title V permitting, these reporting requirements will remain under each emitting unit.
Section II		
EU001	The Plant-Wide Emissions Unit should be more specific as to the Pollution Control Device/Practice.	More specific references have been added.
EU002, EU003, EU005, EU007, EU008, EU009, EU010, EU013, EU014, EU015, EU016	MACT LDAR (as applicable) and/or just LDAR is/are more specific than the term "Monitoring and Maintenance Plan" for the applicable emitting units and the applicable sources within those emitting units.	"Monitoring and Maintenance Plan" has been replaced with LDAR for the applicable emitting units and applicable sources within those emitting units, except for EU016 (please see specific note for EU016).
EU008	SO ₂ CEMS should be added to the Pollution Control Device/Practice column.	The correction has been made.

EU010	A reference to the Permit #1821-05 limits as well as the Low NO _x Technology for the heaters should be added to the Pollution Control Device/Practice column.	The corrections have been made.
EU011	A reference to the Permit #1821-05 limits, the Low NO _x Technology, and the SO ₂ CEMS should be added to the Pollution Control Device/Practice column.	The corrections have been made.
EU012	SO ₂ CEMS should be added to the Pollution Control Device/Practice column.	The correction has been made.
EU001, EU002, EU003, EU004, EU005, EU006, EU007, EU008, EU009, EU010, EU011, EU012, EU013, EU014, EU015, EU017, EU020	Cenex suggests that all of the listed emitting units should make reference to the Billings/Laurel SO ₂ Stipulation limits in the Pollution Control Device/Practice column.	All of the listed emitting units subject to the Billings/Laurel SO ₂ Stipulation limits now make reference to it in the Pollution Control Device/Practice column.
EU013	A reference to the Permit #1821-05 limits and the Low NO _x Technology for the #10 Boiler, as well as the fuel oil flowmeters for the #3, #4, and #5 boilers, should be added to the Pollution Control Device/Practice column.	The corrections have been made.
EU014	Fixed roofs should be added to the Pollution Control Device/Practice column. Also, the tank list contains several errors.	The corrections have been made.
EU016	The Pollution Control Device/Practice column should read "Enclosed conveyance and other wastewater controls for affected equipment per NSPS QQQ."	As LDAR for this emitting unit is specified under QQQ, this wording was used instead of the suggested LDAR wording used in a previous comment.
EU018	The Pollution Control Device/Practice column should read "Restrictions on land tillage."	The correction has been made.
EU020	The Saturate Gas Concentration Heater has been relocated from EU020 to EU002.	The change has been noted and corrected in the permit.
Section III		
A.10, A.11, A.12	Cenex questions if these conditions should be identified as "State-only."	These conditions have been approved into the Montana SIP, and, therefore, are federally enforceable (reference 40 CFR 52.1370 (c)(39)(a)).
A.15	Cenex notes a typographical error in that a reference to "MRC" should be replaced with "Cenex."	The correction has been made.
A.16	Cenex requests clarification regarding the certification required in this condition.	The certification required is only to confirm that the Risk Management Plan was submitted to EPA. As an applicable requirement, it must be included, however, the Department only needs to know that the requirement is being followed.
A.17	Cenex suggests adding "See Appendix G of this permit" directly following the reference to the Billings/Laurel SO ₂ Control Plan.	The correction has been made.
A.22, A.23	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	A paragraph has been added in the TRD in Section III.E Reporting Requirements to specify that redundant reporting is not necessary or intended, and how to reference (not resubmit) previously submitted

		reports in semi-annual monitoring and annual certification reporting. However, to maintain consistency with the other Title V permits and with the intent of Title V permitting, these reporting requirements will remain under each emitting unit.
A.22, A.23	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
EU001	Cenex believes the list of fuel oil and/or fuel gas emitting sources (taken from the Billings/Laurel SO ₂ Control Plan) is an inadequate and inaccurate depiction of a plant-wide/multiple emitting unit presentation for all regulated pollutants.	EU001 has been clarified to better display the plant-wide AND multiple emitting unit limits (such as those for only fuel oil and/or fuel gas emitting sources under SIP limitations).
EU001	Cenex notes that the SIP limits listed only represent those limits for fuel oil and/or fuel gas burning sources. Clarification is needed.	Clarification in the table has been added to emphasize that these limits apply only to fuel oil and/or fuel gas burning sources.
EU001	Cenex suggests adding the following emitting units to Table EU001: EU011, EU012, EU014, EU015, EU016, and EU019.	The addition of these emitting units should be unnecessary based on changes made to clarify EU001.
EU001	Cenex notes some editing changes that need to be made.	These corrections have been made.
EU001	In the "Reporting Requirement" column at the Method 11 Compliance Demonstration, the requirement should be "annual," not "semi-annual."	The frequency of the certification remains "once per year." However, semi-annual reporting is a Title V requirement, even if no new measurements are available.
EU001	Cenex questions the reference to Appendix F of OP1821-00, and thinks that this reference has been superseded (or at least updated) by the requirements of the Billings/Laurel SO ₂ SIP.	The reference to Appendix F of OP1821-00 has been replaced with a more appropriate compliance demonstration. Appendix F of OP1821-00 has been deleted.
EU001	In the "Reporting Requirement" column at the Appendix F Compliance Demonstration, the requirement should be "annual," not "semi-annual."	The frequency of the certification remains "once per year." However, semi-annual reporting is a Title V requirement, even if no new measurements are available.
EU001	Cenex questions if all references to ARM 17.8.710 should be replaced by references to Permit #1821-05.	ARM 17.8.710 is the appropriate reference.
B.7, B.8, B.9	Cenex notes that these conditions do not denote the true allowable SIP SO ₂ emission limits on a plant-wide/multiple emitting unit basis.	These limits are not intended to represent the facility as a whole, but as listed, to only denote a limit that affects the fuel oil and fuel gas combustion sources, which do include more than one emitting unit.
B.11	No applicable requirement is referenced for this condition.	The appropriate citation has been added.
B.11	Cenex suggests deleting the words "...process gas use..." from B.11.	As this wording is directly from Permit #1821-05, it cannot be changed without first changing Permit #1821-05.
B.12	Cenex would like to clarify the use of the term "CEMS."	Although the clarification was added to the EU001 table, the wording of the condition cannot be changed as it comes directly out of the Billings/Laurel SO ₂ Control Plan.

B.12	Cenex suggests adding “See Appendix G of this permit” directly following the reference to the Billings/Laurel SO ₂ Control Plan.	As this reference was already added to A.17, the Department does not see the need to reproduce it.
B.14	It should be noted that the reference to Appendix F for Quality Assurance Requirements for CEMS has presented a technical problem for sources.	40 CFR 60, Appendix F is required to be adhered to only for those NSPS applicable CEMS that are utilized for continuous compliance. There are provisions in 40 CFR 60, Subpart J, whereby the CEMS required for both H ₂ S in fuel gas and SO ₂ /O ₂ on SRU’s need not adhere to Appendix F because the compliance determining method(s) are the Reference Method tests, not the CEM’s themselves. The Department realized that this issue was a major deficiency in terms of utilizing the CEMs for continuous compliance determinations. H ₂ S is not a listed Protocol 1 gas in the concentration range utilized for H ₂ S in fuel gas monitoring but we feel the cylinder gas manufacturers procedures for certifying these standards are surely adequate for Appendix F purposes. Specialty gas manufacturers utilize a procedure or gas standard known as Protocol 11 which is equivalent to or supercedes Protocol 1 procedures listed in Appendix F. These procedures to certify cylinder gas standards under 40 CFR Parts 50, 58, 60 and 75 are now known as G1 and G2 and are published by EPA (Final Report EPA Tractability Protocol for Assay and Certification of Gaseous Calibration Standards September 1997 EPA/600/R-97/121) and are utilized by the specialty gas manufacturers. The Department is not willing to remove this requirement from any of the industrial source permits and have made them a requirement of other refinery permits such as the Conoco coker and sulfur recovery unit, and the revised Billings/Laurel SO ₂ SIP.
B.16	Cenex requests review of this condition as this reference has possibly been superseded (or at least updated) by the requirements of the Billings/Laurel SO ₂ SIP.	The compliance demonstration has been updated to reflect the use of H ₂ S CEMS and Reference Method 11. Appendix F of OP1821-00 has been deleted.
B.17, B.18	No applicable requirement is referenced for this condition.	The appropriate citation has been added.
B.19	The term “..electronic...” should be deleted. No applicable requirement is referenced for this condition.	The term has been deleted. The appropriate citation has been added.

B.21	No applicable requirement is referenced for this condition.	The appropriate citation has been added.
B.24	Cenex suggests that a citation of “Board of Environmental Review Order...” be added.	The citation has been added.
B.25	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.
EU002	The reporting requirement for the opacity measurement should be annually.	The frequency of the opacity measurement remains “as required,” which in this case appears to be annually. However, semi-annual reporting is a Title V requirement, even if no new measurements are available.
C.3	Cenex suggests citing Permit #1821-05 for the first paragraph.	The citation following the second paragraph (ARM 17.8.715) is for the entire condition, not just the second paragraph. No additional citation is necessary.
C.3	Cenex suggests adding the citation of ARM 17.8.340 in addition to ARM 17.8.715.	The citation has been added.
EU002	Timeframe discrepancy between MACT and NSPS for archive period.	Timeframe discrepancy is noted, however, 5 years is the archive period for Title V permits.
C.6, C.7	No applicable requirement is referenced for these conditions.	The appropriate citations have been added.
C.8.d	Cenex suggests adding the words “on an annual basis” after the words “...Attachment 1 of the Stipulation.”	The wording has been added.
C.10	Cenex believes there is a citation error. In addition, Cenex believes a timeframe should be included in this condition.	The citation has been corrected. The timeframe for recordkeeping is 5 years for all Title V requirements.
C.10, C.11	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
C.13	Cenex suggests that a citation of “Board of Environmental Review Order...” be added.	The citation has been added.
C.14	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.
EU003	The reference to the #2 Crude Unit Preheater should be deleted from the list.	The correction has been made.
EU003	In the “Reporting Requirement” column of the table, the frequency of the opacity measurement should be annually.	The frequency of the opacity measurement remains “as required,” which in this case appears to be annually. However, semi-annual reporting is a Title V requirement, even if no new measurements are available.
D.1	Cenex suggests that D.1 should read the same as C.1 (including the allowance for soot blowing, etc.).	The correction has been made.
D.4 and D.6	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
D.8	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.

EU004	In the “Reporting Requirement” column of the table, the frequency of the opacity measurement should be annually.	The frequency of the opacity measurement remains “as required,” which in this case appears to be annually. However, semi-annual reporting is a Title V requirement, even if no new measurements are available.
E.1	Cenex suggests that E.1 should read the same as C.1 (including the allowance for soot blowing, etc.).	The correction has been made.
E.5	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.
EU005	In the “Reporting Requirement” column of the table, the frequency of the opacity measurement should be annually.	The frequency of the opacity measurement remains “as required,” which in this case appears to be annually. However, semi-annual reporting is a Title V requirement, even if no new measurements are available.
F.1	Cenex suggests that F.1 should read the same as C.1 (including the allowance for soot blowing, etc.).	The correction has been made.
F.4 and F.6	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
F.8	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.
EU006	In the “Reporting Requirement” column of the table, the frequency of the opacity measurement should be annually.	The frequency of the opacity measurement remains “as required,” which in this case appears to be annually. However, semi-annual reporting is a Title V requirement, even if no new measurements are available.
G.1	Cenex suggests that G.1 should read the same as C.1 (including the allowance for soot blowing, etc.).	The correction has been made.
G.5	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.
EU007	In the “Reporting Requirement” column of the table, the frequency of the opacity measurement should be annually.	The frequency of the opacity measurement remains “as required,” which in this case appears to be annually. However, semi-annual reporting is a Title V requirement, even if no new measurements are available.
H.1	Cenex suggests that H.1 should read the same as C.1 (including the allowance for soot blowing, etc.).	The correction has been made.
H.4 and H.6	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
H.8	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.

EU008	In the “Reporting Requirement” column of the table, the frequency of the opacity measurement should be annually.	The frequency of the opacity measurement remains “as required,” which in this case appears to be annually. However, semi-annual reporting is a Title V requirement, even if no new measurements are available.
EU008	Cenex suggests adding the words “from the old SWS” following the SO ₂ and NO _x limits applicable to that unit.	The correction has been made.
EU008	In the “Reporting Requirement” column of the table, the frequency of SO ₂ and NO _x from the old SWS should be monthly and quarterly for SO ₂ and monthly for NO _x .	The correction has been made, and a recordkeeping requirement with those time periods has been added to the Title V permit from the preconstruction permit.
EU008	Cenex suggests deleting one of the following references from the table for this emitting unit: “Continuous flow rate monitor” or “Old Sour Water Stripper CEMS.” Cenex believes these references are to the same sour water flow rate meters on the old SWS.	The “Old SWS CEMS” reference has been deleted.
EU008	Clarification is needed between the conditions for the “Continuous flow rate monitor” and the “continuous stack flow rate monitors” for the purposes of applicability.	Clarification has been added to the table.
I.10	The old SWS is not required to have “...CEMS/CERMS for H ₂ S...” Clarification and correction is needed.	The condition has been deleted in favor of the “Continuous flow rate monitor” for the old SWS.
I.14	Cenex suggests adding the words “of Permit #1821-05” immediately following the words “...described in Attachment A.”	The correction has been made.
I.14	No applicable requirement is referenced for this condition.	The appropriate citation has been added.
I.15	Typographical error: Accuracy determinations shall be conducted every 48 months, not for 48 months.	The correction has been made.
I.16	Cenex suggests that language from Section 3.B (3) of the SIP would be more appropriate and accurate.	The correction has been made.
I.16	Cenex suggests that a citation of “Board of Environmental Review Order...” be added.	The citation has been added.
I.22	No applicable requirement is referenced for this condition.	This condition has been deleted as it was redundant.
I.23	The language needs to be corrected per the SIP regarding the startup of the FCC Unit.	The language has been corrected.
I.23	Cenex suggests that a citation of “Board of Environmental Review Order...” be added.	The citation has been added.
I.24	No applicable requirement is referenced for this condition.	The appropriate citation has been added.
I.27, I.28, I.29	No applicable requirement is referenced for this condition.	The appropriate citations have been added.
I.25	Cenex suggests that a citation of “Board of Environmental Review Order...” be added.	The citation has been added.
I.33 and I.34	Cenex would like to point out a conflict in the terms of I.33 and I.34. I.33 should be deleted in favor of I.34.	I.33 has been deleted.
I.34	Cenex suggests that a citation of “Board of Environmental Review Order...” be added.	The citation has been added.
I.35	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.

J.5 and J.6	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
J.8 and J.9	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
J.11	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.
EU010	In the "Reporting Requirement" column of the table, the reporting frequency should be monthly and/or quarterly, respectively, for the entire column of the table, except for the last two entries in this table.	The correction has been made.
EU010	References to "firing natural gas only" in the "Compliance Demonstration/Method" column of the table are only correct when all HDS sources are fired exclusively on natural gas. Cenex must still conduct stack testing for VOC emissions from these sources when they are fired on refinery fuel gas.	Method 18 has been added as a compliance demonstration when fired on refinery fuel gas.
EU010	The entry "New SWS Feed Tank and Sulfur Recovery Pit" should be identified as "state-only."	This condition has been removed, and will be removed from Permit #1821-06 at the next opportunity.
EU010	In the "Pollutant/Parameter" column for H ₂ S from H-202, H-201, H-101, the word "from" should be changed to "...in fuel gas to...". Also, the "Permit Limit" column for the same entry should read "Fuel oil cannot be fired in these units," not "this unit."	The corrections have been made.
K.5	Cenex suggest that this requirement be identified as "state-only."	This condition has been removed, and will be removed from Permit #1821-06 at the next opportunity.
K.25	The reference to Compressor C201-B should be removed and no applicable requirement is referenced for this condition.	The correction has been made, and a citation has been added.
K.26	The SIP does not place the additional monitoring requirements of Zone A fuel gas CEMS on Zone D fuel gas CEMS.	This condition has been deleted.
K.14 and K.19	Cenex suggests clarifying the citation to "NSPS Subpart J" to a more specific reference of "40 CFR 60, Subpart J."	The corrections have been made.
K.32	Cenex suggest that this requirement be identified as "state-only."	This condition has been removed, and will be removed from Permit #1821-06 at the next opportunity.
K.28, K.29, K.30, K.31, K.32	No applicable requirements are referenced for these conditions.	The appropriate citations have been added. K.32 has been deleted.
K.42	There is inconsistent language regarding startup. More definitive language is in the SIP for startup of the HDS Complex SRU.	More definitive language regarding startup and shut down has been added.
K.38, K.40, K.41, K.42	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
K.45, K.46, K.47, K.50, K.51	No applicable requirements are referenced for these conditions.	The appropriate citations have been added. K.50 has been deleted.
K.50	Cenex suggest that this requirement be identified as "state-only."	This condition has been removed, and will be removed from Permit #1821-06 at the next opportunity.
K.52 and K.54	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
K.55	Cenex suggests that a citation of "Board of Environmental Review Order..." be added.	The citation has been added.

K.56	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.
EU011	In the "Reporting Requirement" column of the table, the reporting frequency should be monthly and/or quarterly.	The correction has been made.
L.4	Cenex suggests deleting the words "Cenex shall not fire fuel oil in this unit." The fuel oil loop is not even tied into EU011.	The words "Cenex shall not fire fuel oil in this unit" was taken directly from Permit #1821-05. The wording must be removed from Permit #1821-05 before it can be removed from the Title V permit.
L.5	Cenex suggests that the citation ARM 17.8.710 be included.	The citation has been added.
L.22	There is inconsistent language regarding startup. More definitive language is in the SIP for startup of the HDS Complex SRU.	More definitive language regarding startup and shut down has been added.
L.13, L.16, L.17, L.18, L.19, and L.21	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
L.22	Cenex suggests that a citation of "Board of Environmental Review Order..." be added.	The citation of ARM 17.8.710 has been added.
L.28, L.30	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
L.35	No applicable requirements are referenced for these conditions.	The appropriate citation has been added.
L.36	Cenex suggests that a citation of "Board of Environmental Review Order..." be added.	The citation has been added.
L.37	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.
EU012	"#1 and #2 Sulfur Recovery Units" need to be added after "Tail Gas Oxidizer Stack." Also, both sulfur units share the Incinerator.	The correction has been made.
EU012	In the "Frequency" portion of the "Compliance Demonstration" column for the entry "Continuous Gas Flow Rate Monitor, the frequency should be changed to "at least once every 48 months."	The correction has been made.
EU012	Cenex requests that the last two entries in the table (i.e., "SRU" and "Process Weight" be deleted. There are no "maximum sulfur production rates" and/or "Process Weight" requirements on the old SRU's.	The conditions are listed in permit #1111 dated November 21, 1977. Permit #1111 remains an active permit.
M.9	Cenex questions if this condition was meant to apply to them, and if not, it should be deleted.	The condition is listed in permit #1111 dated November 21, 1977.
M.16	Cenex suggests that a citation of "Board of Environmental Review Order..." be added.	The appropriate citation has been added (ARM 17.8.1213).
M.17	As M.17 is a compliance determination for M.9, Cenex requests that it also be deleted.	M.17 is a compliance demonstration for M.9, which is listed as a condition of permit #1111 dated November 21, 1977.
M.19	No applicable requirement is referenced for this condition.	The appropriate citation has been added.
M.23	Cenex suggests that a citation of "Board of Environmental Review Order..." be added.	The citation has been added.
M.24	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.

EU013	In the “Reporting Requirement” column, the term should be changed from “Semi-annual” to “monthly and/or quarterly” as per Permit 1821-05 and the Billings/Laurel SO ₂ Stipulation for all “Pollutant/Parameter” entries regarding the #10 Boiler, except for the Subpart GGG entry, which should be semiannual.	The correction has been made.
EU013	In the “Reporting Requirement” column, the term should be changed from “Semi-annual” to “quarterly and/or annually” as per the Billings/Laurel SO ₂ Stipulation for the entry regarding the H ₂ S limit on the #9 Boiler.	The correction has been made.
EU013	References to “firing natural gas only” in the “Compliance Demonstration/Method” column of the table are only correct when #10 Boiler is fired exclusively on natural gas. Cenex must still conduct stack testing for VOC emissions from this source when it is fired on refinery fuel gas.	Method 18 has been added as a compliance demonstration when fired on refinery fuel gas.
EU013	For clarity, the words “#10 Boiler only” should be placed in parenthesis directly following “99.90 MMBtu/hr” in the “Permit Limit” column of the table at the entry for “Heat Input.”	The correction has been made.
EU013	In the “Reporting Requirement” column, the term should be changed from “Semi-annual” to “monthly and/or quarterly” as per Permit #1821-05 and the Billings/Laurel SO ₂ Stipulation for the entry regarding the H ₂ S concentration monitor.	The correction has been made.
EU013	In the “Compliance Demonstration” column, the term should be changed from “As needed” to “At least every 48 months” as per the Billings/Laurel SO ₂ Stipulation for the entry regarding the fuel gas flow rate meter.	The correction has been made.
EU013	Cenex suggests adding an entry in the “pollutant/parameter” column regarding opacity for the #3, #4, #5 Boilers and the allowance made for sootblowing.	The condition has been added.
N.11	Cenex questions the need to continuously verify stack height and demonstrate compliance.	As stack height is a requirement in the preconstruction permit, it must be a condition in the Title V permit as well. However, a compliance demonstration condition has been added to have Cenex notify the Department only if the stack height differs from the condition.
N.15, N.16, N.17, N.19	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
N.19	Cenex questions the need for this requirement (the fuel oil loop is not tied into the #10 boiler).	The words “Cenex shall not fire fuel oil in this unit” was taken directly from Permit #1821-05. The wording must be removed from Permit #1821-05 before it can be removed from the Title V permit.
N.28, N.29, N.30, N.33, N.34	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
N.32	Cenex suggests deleting this condition. Source testing requirements demonstrate that the low NO _x burners are functioning properly.	This condition has been deleted.

N.36, N.37, N.38, N.39	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
N.40	Cenex suggests that a citation of “Board of Environmental Review Order...” be added.	The citation has been added.
N.41	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.
EU014	Tank 118 should be deleted and Firetk1 should be listed here. There should be consistency between the lists of tanks shown here and the list of tanks (and tank heaters) shown in Section II and the table in Section II.B of the TRD.	The corrections have been made, and consistency has been checked between the lists.
O.1	Cenex suggests adding a complete list of tanks subject to MACT Group 1 and Group 2 requirements to clarify this requirement.	The list has been added.
O.1	No applicable requirement is referenced for this condition.	The appropriate citation has been added.
O.3	The CHS tank farm is not regulated under 40 CFR 63, Subpart R. It is regulated under 40 CFR 63, Subpart CC.	The correction has been made.
O.3, O.4	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
O.5	No applicable requirement is referenced for this condition.	The appropriate citation has been added.
O.6	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.
EU015	In the “Compliance Demonstration” column for the VOC entry, the frequency required in Permit #1821-05 is four years, not five years.	The testing policy has been changed to reflect the duration of the Title V permit. Permit #1821-05 will be modified to reflect this change in policy at the next opportunity.
EU015	In the “Reporting Requirement” column for the Equipment Leaks of VOC entry, the frequency required per MACT regulations is semiannually.	The correction has been made.
P.11	Cenex suggests that this condition be deleted.	As the stack height requirement is in the preconstruction permit, it cannot be deleted, however, the compliance demonstration has been changed to have Cenex notify the Department only if the stack height differs from the condition.
P.16		This condition has been deleted due to the improper reference of ARM 17.8.316 (not applicable in this case). It has been replaced with a general 20% opacity limitation (ARM 17.8.304). The condition will be removed from the preconstruction permit at the next opportunity.
P.18	Cenex suggests that this condition be deleted. Also, applicable requirement is referenced for this condition.	This condition is the appropriate compliance demonstration for P.8 (see also C.3 and C.7). The appropriate citation has been added.

P.10, P.11, P.15, P.16, P.17, P.18	No applicable requirements are referenced for these conditions.	The appropriate citations have been added. Condition P.16 has been deleted.
P.21, P.22	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
P.25	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.
EU016	Cenex suggests adding Tank 23, Tank 25, Tank 119, Tank 601, Tank 44, and New Wastewater Treatment Unit Vessels to the list of sources under this emitting unit.	The correction has been made.
Q.1, Q.2, Q.3	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
Q.5	Cenex suggests deleting the words "...all testing and procedures."	"Applicable" was added to clarify the statements.
Q.4, Q.5, Q.6	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
Q.7, Q.8, Q.9	No applicable requirements are referenced for these conditions.	The appropriate citations have been added.
Q.10	No applicable requirement is referenced for this condition.	The appropriate citation has been added.
Q.11	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.
EU017	Cenex requests that the entry in the table regarding the 10 grain/100 dscf limit on H ₂ S in fuel gas be deleted.	See reply regarding R.1, R.4.
R.1, R.4	Cenex requests that these conditions be deleted.	These conditions have been deleted.
R.5, R.7	Cenex suggests that a citation of "Board of Environmental Review Order..." be added.	The citation has been added.
R.10	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.
EU018	Cenex questions the listing of only the two ground water remediation wells shown.	The listing of the two ground water remediation wells has been deleted.
EU018	The Pollution Control Device/Practice column should read "Restrictions on land tillage."	The Pollution Control Device/Practice column in Section II has been corrected.
EU018	Cenex believes there is no semi-annual reporting requirement for opacity on the RCRA units.	Opacity is an applicable requirement to all emitting units. Since the compliance demonstration is "as required by the Department," Cenex may or may not have a new test to report semi-annually. Semi-annual reporting is a requirement of Title V.
S.1	Cenex questions the applicability of this condition in light of the land tillage restrictions in the HSWA permit.	See response to EU018.
S.5	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.
EU019	Cenex questions the applicability of the opacity condition to cooling towers, in that a Method 9 test is not applicable to water vapor.	Opacity is an applicable requirement to all emitting units. 40 CFR 60 Method 9 provides alternate methods when dealing with a steam plume.
T.1, T.2	Cenex questions the applicability of these conditions.	See response to EU019.

T.5	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.
EU020	It should be noted that the Saturate Gas Concentration Heater has been relocated from EU020. This unit is now in service as the #1 Crude Unit Vacuum Heater (i.e., EU002).	The Saturate Gas Concentration Heater has been removed from the EU020 listing.
EU020	In the "Reporting Requirement" column of the table, the frequency of the opacity measurement should be annually.	The frequency of the opacity measurement remains "as required," which in this case appears to be annually. However, semi-annual reporting is a Title V requirement, even if no new measurements are available.
U.5	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding A.22, A.23.
Section V		
B. Certification Requirements	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	Each facility is required to submit semi-annual monitoring reports and annual certification by ARM 17.8 Subchapter 12 and by 40 CFR Part 70. However, the Department has clarified in Section III.E Reporting Requirements of the TRD that no redundant reporting is necessary.
D. Monitoring, Recordkeeping, and Monitoring Requirements	Cenex requests DEQ give consideration to reducing or eliminating overlapping and repetitive reporting requirements.	See reply regarding Section V.B. above.
F. Emergency Provisions, 2.d	There appears to be a discrepancy between the three provisions in the citation of the ARM and the two-day requirement of Emergency Provision 2.d.	The second sentence of Emergency Provisions 2.d. means that if Cenex reports this information Cenex has not only met the requirement under Emergency Provisions, but also under the general Title V reporting requirements.
S. Source Testing Protocol	Cenex is concerned about the use of this guidance document in this Title V permit.	The Department has added ARM 17.8.106, an applicable requirement, to Section III.A, Facility Wide Requirements as Section III.A.1. This section specifies use of the current (July 1994) version of the Montana Source Test Protocol and Procedures Manual, unless this version is superseded by rulemaking. All other references to the Source Test Protocol in OP1821-00 have been changed to Section III.A.1.
W. Motor Vehicles	Cenex believes that mobile sources are not regulated under the Title V program for stationary sources. Cenex requests that this General Condition be removed from this Title V operating permit prior to issuance.	ARM 17.8.325 could become an applicable requirement as a part of preconstruction at the facility; therefore, it would be required to have that applicable requirement in the Title V permit.

EE. Emergency Episode Plan	Cenex requests that this General Condition be removed from this Title V operating permit prior to issuance.	An Emergency Episode Plan could become an applicable requirement to the facility; therefore, the Department is required to state the requirement, even if it is in a general matter.
Appendices		
Appendix F		This appendix has been deleted.
TRD		
Table of Contents	Section IV should be "Requirements Not Identified as Non-Applicable" and Section V should be "Future Permit Considerations."	The correction has been made.
Section II.B	Cenex suggests that this table be consistent with the final version of the table in Section II in the final permit with more information placed in the "Pollution Control/Device" column.	The table in the TRD has been updated to reflect the version in the final permit.
Section III.A	Cenex requests the correction of a typographical error.	The correction has been made.
Sections III, IV, and V	There is a numbering error for sections in the TRD.	The correction has been made.
Sections V.A, B, C, and D	Cenex questions the validity of the date 10/27/00.	The date is only to show that the applicability of the requirements listed was confirmed by the Department prior to the draft permit being released.

Summary of EPA Comments

Permit Reference	EPA Comment	Department Response

SECTION IV. REQUIREMENTS NOT IDENTIFIED AS NON-APPLICABLE

Pursuant to ARM 17.8.1221, Cenex requested a permit shield for all non-applicable regulatory requirements and regulatory orders identified in the tables in Section 8 of the permit application. In addition, the Cenex permit application also requested a permit shield for both the facility and for certain emission units. The Department has determined that the requirements identified in the permit application for the individual emission units are non-applicable. These requirements are contained in the permit in Section IV- Non-applicable Requirements.

The following table outlines those requirements that Cenex had identified as non-applicable in the permit application, but will not be included in the operating permit as non-applicable. The table includes both the applicable requirement and reason that the Department did not identify this requirement as non-applicable.

Applicable Requirement	Reason for Not Including
Section 7411(d) of the FCAA Title VI – Stratospheric Ozone Protection (FCAA)	These rules have both procedural and specific requirements that may become relevant to a major source during the permit span.

SECTION V. FUTURE PERMIT CONSIDERATIONS

A. MACT Standards

As of 10/27/00, 40 CFR 63, Subpart CC, is applicable to the Cenex Refinery. The Department is not aware of any proposed or pending MACT standards that may be applicable.

B. NESHAP Standards

As of 10/27/00, 40 CFR 61, Subpart FF, is applicable at the Cenex Refinery. The Department is not aware of any proposed or pending NESHAP standards that may be applicable.

C. NSPS Standards

As of 10/27/00, 40 CFR 60, Subpart A, Dc, J, Kb, GGG and QQQ, are applicable at Cenex. The Department is not aware of any proposed or pending NSPS standard that may be applicable.

D. Risk Management Plan

As of 10/27/00, this facility does exceed minimum threshold quantities for any regulated substance listed in 40 CFR 68.115 for any facility process. Consequently, this facility is required to submit a Risk Management Plan.

If a facility has more than a threshold quantity of a regulated substance in a process, the facility must comply with 40 CFR 68 requirements no later than June 21, 1999; 3 years after the date on which a regulated substance is first listed under 40 CFR 68.130; or the date on which a regulated substance is first present in more than a threshold quantity in a process, whichever is later.